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XXXII. *An Account of two new Tortoises;
in a Letter to Matthew Maty, M. D.
Sec. R. S.: By Thomas Pennant, Esq;
F. R. S.*

S I R,

Read May 2, 1771. **I** BEG the favour of you to lay before the Royal Society, an account of two tortoises that have just fallen into my hands.

The first was communicated to me * by my worthy and learned correspondent Doctor Garden, of Charles Town, in South Carolina; a gentleman to whom the world is indebted for various information relating to the natural history of that province; and whose assiduity promises fair to enable me to make considerable additions to the accounts already given of the new world. He has favoured me with an ample description of this new animal; together with some relation of its manners; both of which are now delivered to the Society in the words of the ingenious writer.

* The specimen now under the inspection of the Society, was lent me, by my good friend Mr. Ellis; my own specimen being in the country: to Mr. Ellis I was also indebted for the elegant drawing of the animal, done from the life, in South Carolina.

“ I now come to speak of a species of Turtle or
 “ Tortoise, peculiar to our southern rivers. We call
 “ it the *soft shelled* Turtle; because, when alive, the
 “ covering looks like leather, very smooth and pliable,
 “ without any appearance of bone in it. It is
 “ very swift and fierce. They are not commonly
 “ got here in Charles-town, though by chance
 “ this last summer, I had two sent me. One of
 “ them I had preserved entire and sent to our friend
 “ Mr. Ellis; the other, less perfect, I have sent you.
 “ This is a very curious animal, and I think, a non-descript,
 “ for there is none of Linnæus’s fifteen species, that resemble it,
 “ except the first; and that, he particularly mentions, is found in the
 “ * Mediterranean; but this always inhabits fresh waters,
 “ remote from the sea. The head and snout are particularly distinguished
 “ from every other Turtle; and what is more, I am told they exceed
 “ any turtle in the delicacy of their taste and flavour. I never eat
 “ any of them; but have heard many speak of them who were great
 “ epicures, and they have assured me, that they were far preferable
 “ to the green kind.”

* There are two species of Tortoises in that sea, a coriaceous one,
 and another resembling that of the West Indies, which is scarce eatable.
 The last I procured from Leghorn, and at this time am doubtful whether it
 differs specifically from the West Indian Turtle.

Fresh Water Turtle, commonly called Soft Shelled Turtle. TAB. X.

“ THEY are found in large quantities in Savannah and Alatomaha rivers ; and I have been told that they are very common in the rivers in East Florida.

“ They grow to very large sizes, though the largest that ever I heard of was seventy pounds.

“ The Turtle, which I now have by me, weighs twenty pounds ; and probably, when I first got it, it might have weighed from twenty-five to thirty pounds, as I have observed that it has grown poorer every day. I have had it now near three months, and I never could observe that it has eaten any thing that has been given it, though a variety of things have been tried.

“ It is twenty inches long from one end of the shell or covering to the other, and fourteen inches and a half broad. The colour of this shell or covering, in general, is dark brown, with a greenish cast.

“ The middle part is hard, strong, and bony ; but all round the sides, especially towards the tail and hindmost part, it is cartilaginous, soft and pliable, resembling thick tanned sole-leather, yielding very easily to any force in any direction whatever, but thick enough and strong enough to defend the animal from any injury. All the hind part of the back is full of oblong smooth knobs ; and the fore part, just where it covers the head and neck, is studded full of large knobs. The under side of this plate is very beautiful,

Fig. 1.

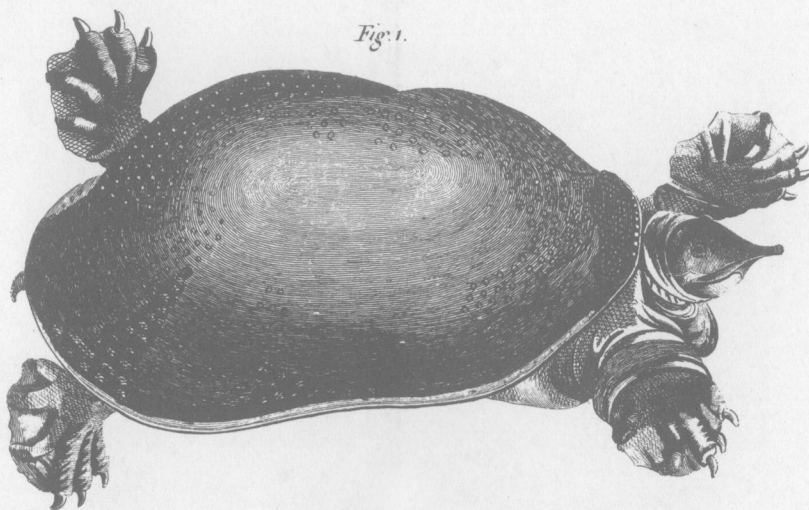


Fig. 2.

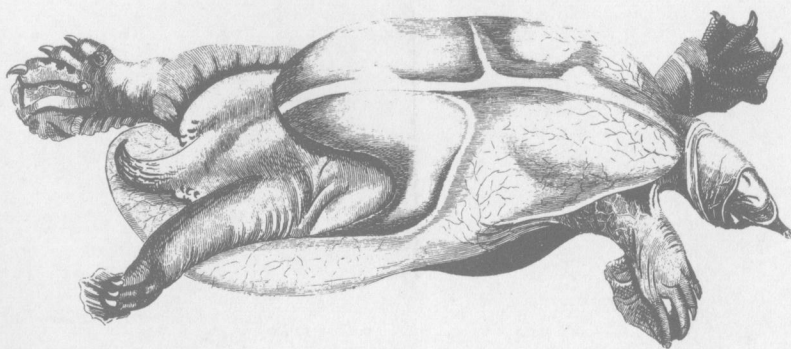


Fig. 4.

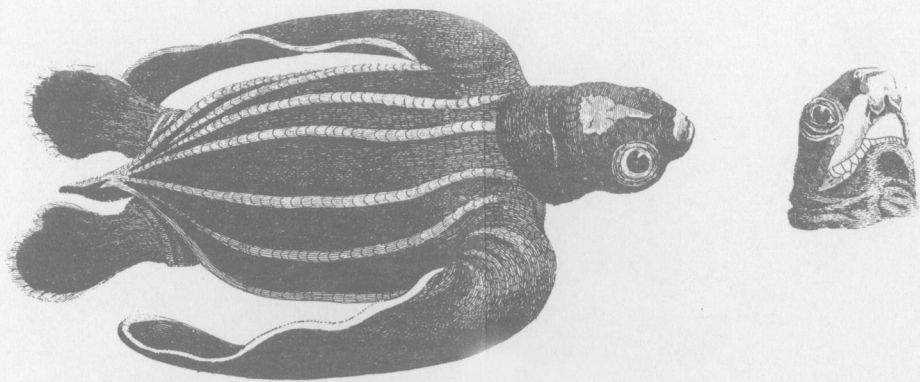
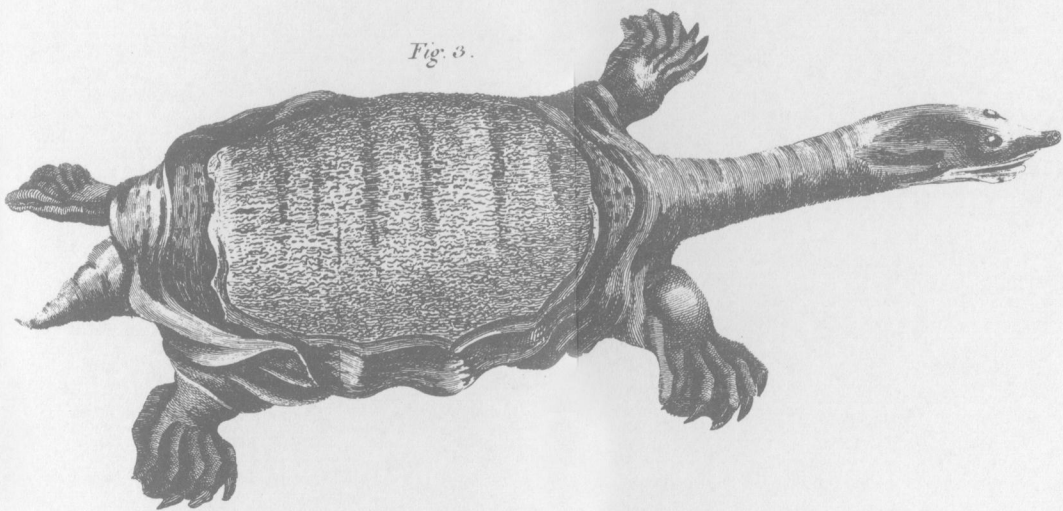


Fig. 3.



beautiful, of a lively whitish colour, interspersed with innumerable very fine ramifications of blood vessels, running from the margin of the plate into larger and larger branches, until the sight of them is at once lost by their entering the body of the animal.

“ The under, or belly plate, or rather *sternum*, is of a fair whitish colour, and extended forward two or three inches more than the back plate, so that the head rests on it very conveniently. The hind part of this plate is hard and bony, shaped very much like a man's riding saddle, with two pieces for the thighs to rest on. The fore part of the plate is pliable and cartilaginous.

“ The head is somewhat triangular and attenuated, rather apparently small for the animal, but growing gradually larger towards the neck, which is thick and long, and easily extended out (the neck of the present subject was thirteen inches and a half long) to a great length, or drawn back again under the shell or plate.

“ The eyes are placed in the fore and upper part of the head, near to one another, having pretty large loose palpebræ. The pupil is small and lively, surrounded by a lemon-coloured *iris*, perfectly round, and giving much life and fire to the eyes. When danger approaches, or when it goes to sleep, it covers its eyes, by bringing the inner and loose part of the lower *palpebræ* over its eye, like a *membrana nictitans*.

“ The upper lip and under lip are both large, but especially the upper. The *mandibula* are both entire, each being one entire bone all round, of the same shape as the mouth.

“ The

“ The nostrils are the most singular part, being a cartilaginous production of at least three quarters of an inch, beyond the upper and fore angle or point of the upper lip, perforated with two apertures reaching back and opening into the roof of its mouth, having a smooth *septum* but fimbriated upon each side. This, at first sight, in some manner resembles the snout of the mole ; but it is tender, thin and transparent, and cannot be intended for digging in the earth or land.

“ The arms are thick and strong, consisting of three distinct joints, *viz.* the upper, the fore arm, and hand. The hands have each five fingers, of which the three first are shorter and stronger, and furnished with strong nails, or rather claws. The two last fingers have more joints, but are smaller, and, instead of being furnished with claws, are covered with the membrane, which is extended even beyond their extremities. Towards the back or hind part, there are two spurious fingers, which just serve to support the membrane when extended. The upper side of these arms and hands are covered with a wrinkled loose skin, of a dusky greenish colour. The legs consist of the same number of joints, and have the same number of toes as there are fingers on the fore-feet, and these are furnished with nails in the same manner, only there is but one spurious toe. Both the fore and hind legs are thick, strong, and muscular ; and as the animal is very fierce, when it is attacked or disturbed, it often raises itself on its legs, and will leap forward to bite its disturber or enemy, which it does with great fury and violence.

“ They

“ They are likewise very strong, and of a lively whitish colour, because they are generally, if not always, covered with the upper plate, which, as I said before, is extended a great way behind.

“ The tail is large and thick, and generally as long as the hind part of the upper plate. The anus is placed about an inch from the extremity of the tail on the inside.

“ The Turtle, from which these characters were taken, was a female; after she came into my possession she laid fifteen eggs, and about the same number were taken out of the belly when she died. The eggs were nearly an inch diameter, and perfectly spherical.

“ It is esteemed very good eating, and said by many to be more delicate than the green turtle.”

*The other Species of Tortoise, which I name
the Tuberculated,*

was communicated to me by Mr. Humphries, of St. Martin's-Lane, merchant of minerals, shells, and insects. He was unacquainted with its place and history; therefore I must content myself with giving a meer description of it, deprived as I am of the knowledge of its manners and uses, without which even natural history is as replete with dulness as with inutility.

Its length, from nose to the extremity of the back, is three inches three lines ; its greatest breadth, one inch and a half.

The head is large and scaly. The neck thick and wrinkled. Eyes full ; nostrils small and oval ; the end of the upper mandible long and bifurcated, lapping very far over the lower.

The back is divided length-ways, with five prominent ribs covered with large yellow tubercles, the intervening part is dusky and divided by multitudes of lesser and more depressed tubercles. The whole circumference of the back bounded by a tuberculated rib, like those on the upper part. The extremity furcated. The whole is coriaceous and pliant.

The tail is depressed sideways, tapers to a point, and reaches beyond the end of the back.

The belly is yellow, tuberculated like the back, but marked with six rows greatly prominent.

The prior fins are longer than the whole body, very thin, dusky, and edged on their interior sides with white, and both the surfaces are covered with depressed tubercles. The hind fins are broad, much dilated near their end, and slightly bilobated : none of these fins had the least marks of toes or nails.

This may probably be the same with the *Testudo coriacea* of *Linnaeus*, p. 350, or the coriaceous one above mentioned : but, as I have not at present before me the authors cited by that able naturalist, I will not pretend to pronounce with certainty whether it is the same.

Explanation of the Figures.

TAB. X.

- Fig. 1. The soft-shelled Tortoise.
 2. The same on its back.
 3. The same with its neck exerted ; drawn from
 the dried animal.
 4. The tuberculated Tortoise.
 5. Exhibits the form of the mouth.